

L 57558-65 ENT(1)/EPA(s)-2/ENT(m)/EWP(1)/EEC(t)/T/EWP(t)/EWP(b)/EWA(c) Pt-7/P1-4  
IJP(c) JD/GG

ACCESSION NR: AP5016144

UR/0048/65/029/006/1016/1018

AUTHOR: Bursian, E.V.; Smirnova, N.P.

TITLE: Concerning spontaneous polarization in barium titanate thin films /Report, 4th All-Union Conference on Ferroelectricity held in Rostov-on-the-Don 12-18 Sept 1964/

SOURCE: AN SSSR.Izvestiya.Ser.fizicheskaya,v.29, no.6, 1965,1016-1018

TOPIC TAGS: ferroelectric material, barium titanate, thin film, pyroelectric effect, dielectric constant, phase transition

ABSTRACT: In this paper the authors report on a continuation of their earlier work (Fiz.tverdogo tela 6,1818,1964) on the ferroelectric properties of thin  $\text{BaTiO}_3$  films. The dielectric constants of films of different thicknesses were measured at different temperatures with different measuring field strengths. The measurements were performed with 4 microsec pulses at a repetition rate of  $500 \text{ sec}^{-1}$ . As a function of temperature the dielectric constant of a 27 micron thick film measured with a 2 kV/cm field went through maxima at  $-80^\circ$ ,  $0^\circ$  and

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0

120°C. These maxima were less prominent in thinner films, and in 1 micron films they were no longer definitely perceptible. The maximum at 120° decreased the most rapidly, and that at 0° decreased the least rapidly, with decreasing film thickness. Increasing the measuring field strength increased the effective dielectric constant much more in the orthorhombic phase than in the other two ferroelectric phases. Measurements at different temperatures of the dielectric constant of a 5 micron film as a function of the measuring field strength showed that the rhombohedral phase saturates at a lower field than the orthorhombic phase and the orthorhombic phase saturates at a lower field than the tetragonal phase. Pyroelectric currents were measured in plates from 10 to 100 microns thick. These currents went through maxima near the Curie point. These maxima were more smeared out for the thinner plates, but the areas under the peaks were approximately independent of plate thickness. Orig.art.has: 4 figures.

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ACCESSION NR: AP5016144

ASSOCIATION: Leningradskiy gosudarstvennyy pedagogicheskiy institut  
im.A.I.Gertsena (Leningrad State Pedagogical Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: SS,EM

NR REF SOV: 003

OTHER: 006

Card

3/3

SCHASTNEV, P.N.; TEREKHOV, P.G.; SMIRNOVA, N.P., red.; SAKHAROVA, N.V.,  
tekhn. red.

[General geography; textbook for teachers' schools] Obshchee  
zemlevedenie; uchebnik dlia pedagogicheskikh uchilishch.  
3. izd., perer. Moskva, Uchpedgiz, 1954. 338 p. (MIRA 16:6)  
(Physical geography)

SMIRNOVA, N.P.

The Buzuluk-Medveditsa watershed and the Vodyanaya Ravine. Trudy  
Lab. ozeroved. 9:150-156 '60. (MIRA 13:8)  
(Buzuluk Valley (Stalingrad Province)--Farm ponds)  
(Medveditsa Valley--Farm ponds)

SMIRNOVA, N.P.

Methods of field work in water and heat balance research and the  
working up of data obtained. Trudy Lab. ozeroved. 9:166-181 '60.  
(MIRA 13:8)

(Vyazovka District (Stalingrad Province)--Farm ponds)  
(Hydrometeorological research)

SMIRNOVA, N.P.

Heat balance of the Polivnoy Pond in the summer and fall of 1951-  
1954. Trudy Lab. ozeroved. 9:203-237 '60. (MIRA 13:8)  
(Vyazovka District (Stalingrad Province)--Farm ponds)  
(Hydrometeorology)

YEFREMOV, Yuriy Konstantinovich, geograf; SMIRNOVA, N.P., red. izd-va;  
NAZAROVA, A.S., tekhn. red.

[In the name of nature's everlasting generosity] Vo imia vechnoi  
shchedrosti prirody. Moskva, Izd-vo "Znanie," 1961. 31 p. (Vsesoiuz-  
noe obshchestvo po rasprostraneniu politicheskikh i nauchnykh zna-  
nii. Ser.12, Geologiya i geografiya, no.16) (MIRA 14:11)  
(Natural resources)



SMIRNOVA, N.P.

Meteorological conditions during the field work of the expedition  
(1956-58). Trudy Lab. ozeroved. 12:25-34 '61. (MIRA 15:3)  
(Ladoga Lake region--Meteorology)

SMIRNOVA, N.P.

Radiational elements of the heat balance in the skerry region  
of Lake Ladoga. Trudy Lab. ozeroved. 12:35-59 '61. (MIRA 15:3)  
(Ladoga, Lake--Solar radiation)

SMIRNOVA, N.P.; SMIRNOV, L.Yu.

Using aerial photography in studying vast deltas; based on the  
example of the Ili River. Izv.Vses.geog.ob-va 93 no.5:418-422  
S-0 '61. (MIRA 14:10)  
(Ili Valley--Aerial photography) (Deltas)

S/020/61/136/003/014/027  
B019/B056

AUTHORS: Izotova, A. F., Ogneva, T. A., and Smirnova, N. P.  
TITLE: The Wind Profile in the Water-near Layer Above Lake Ladoga  
PERIODICAL: Doklady Akademii nauk SSSR, 1961, Vol. 136, No. 3,  
pp. 587-590

TEXT: From July 7 to August 16, 1959, the vertical wind velocity profile above lake Ladoga, and its dependence upon the stratification temperature was studied, and also the roughness of the wind was determined. The observations were carried out by means of a remote anemometer with electric contact which had been designed at the Glavnaya geofizicheskaya observatoriya im. A. I. Voyeykova (Geophysical Main Observatory imeni A. I. Voyeykov). These anemometers were installed on a mast on the south side of the island Khankhipasi in altitudes of 6.15, 3.15, 1.65 and 0.75 m reckoned from the mast fundament. From the tape recordings the values averaged for one hour were used for the analysis. These analyses were carried out in consideration of the direction of the wind with and

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The Wind Profile in the Water-near Layer  
Above Lake Ladoga

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without taking the thermal stratification into account. The latter was carried out with a temperature difference of  $\Delta T$  between water and air. The small size of the island warranted conditions that were not influenced by land, as a comparison of the temperature measurements carried out on the island Khankhipasi and near it shows. In Table 1 the mean values of the vertical wind velocity profile and of the roughness parameter with and without taking the thermal stratification into account, were given. There are 3 figures, 1 table, and 7 references: 5 Soviet, 1 German, and 1 British. ✓

ASSOCIATION: Laboratoriya Ozerovedeniya Akademii nauk SSSR (Laboratory of Lake Science of the Academy of Sciences, USSR)

PRESENTED: June 18, 1960, by D. V. Nalivkin, Academician

SUBMITTED: June 16, 1960

Card 2/4

Направление ветра	I	II	III группа					
			a высота, м				число из-мерений	Σ, см
			0,15	3,15	1,65	0,75		
1 ЮВ-ЮЮВ	ЮВ-ЮЮВ Ю-ЮЮВ ЮЗ	Без учета терм. стратифик. $\Delta T < 2^\circ$ $\Delta T > 4^\circ$ $2^\circ < \Delta T < 4^\circ$	2,8	2,1	1,9	1,6	31	1,66
2 ЭСЗ, ВЮВ			2,1	1,8	1,8	1,5	7	0,46
3 СВ-СВВ			3,1	2,4	2,0	1,5	11	—
3 С-ССВ	ЭСЗ, ВЮВ П-ВСВ	Без учета терм. стратифик. $\Delta T < 2^\circ$ $\Delta T > 4^\circ$ $2^\circ < \Delta T < 4^\circ$	2,5	2,0	1,8	1,6	15	3,02
3 С-ССВ			2,2	2,1	2,1	1,9	2	0,00
3 С-ССВ			3,0	2,4	2,0	1,7	10	—
3 С-ССВ	СВ-СВВ С-ССВ СЗ	Без учета терм. стратифик. $\Delta T < 2^\circ$ $\Delta T > 4^\circ$ $2^\circ < \Delta T < 4^\circ$	2,5	1,9	1,7	1,4	12	—
3 С-ССВ			2,7	2,1	1,8	1,5	31	7,62
3 С-ССВ			2,0	1,6	1,6	1,4	5	—
3 С-ССВ			2,2	2,3	1,9	1,6	8	—
3 С-ССВ			2,8	2,1	1,9	1,5	7	—
3 С-ССВ								

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II группа										III группа										IV группа										Средн. взвешенное $\Sigma$ , см
a высота, м					число из-мерений	$\Sigma$ , см	a высота, м					число из-мерений	$\Sigma$ , см	a высота, м					число из-мерений	$\Sigma$ , см										
0,15	3,15	1,65	0,75				0,15	3,15	1,65	0,75				0,15	3,15	1,65	0,75				0,15	3,15	1,65	0,75						
4,0	3,4	3,1	2,7	84	0,68	6,7	5,9	5,4	4,8	17	0,32	7,7	7,2	6,7	6,0	1	0,04	0,99												
3,4	3,2	3,1	2,7	19	0,06	5,8	5,4	5,2	4,5	4	0,06	7,7	7,2	6,7	6,0	1	0,05	0,15												
4,8	4,1	3,6	3,0	3	—	7,4	6,4	5,7	5,0	—	—	—	—	—	—	—	—	—												
4,4	3,7	3,2	2,6	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—												
3,1	3,6	3,0	2,8	30	1,83	6,0	5,5	4,9	4,4	8	0,72	7,8	7,4	6,2	6,0	2	0,11	1,93												
4,1	3,8	3,2	2,9	18	0,72	5,8	5,5	4,8	4,5	7	0,06	7,9	7,5	5,5	6,0	1	0,14	0,49												
4,2	3,4	2,9	2,5	7	—	7,0	6,0	5,3	4,5	—	—	—	—	—	—	—	—	—												
4,8	4,2	3,6	3,3	13	—	6,9	5,9	5,2	4,6	1	—	—	—	—	—	—	—	—												
4,8	4,2	3,4	2,7	22	6,81	8,4	7,5	5,6	4,4	—	7,62	—	—	—	—	—	—	—												
5,6	5,1	3,9	3,1	7	—	8,8	7,9	5,9	4,6	—	—	—	—	—	—	—	—	—												
4,2	3,5	3,0	2,5	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—												
4,6	3,8	3,2	2,7	8	—	7,7	6,8	5,1	4,0	1	—	—	—	—	—	—	—	—												

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Legend to Table 1: I) Direction of wind. I1) Southeast - south-south-east - south - south-south-west - southwest. I2) West-northwest - east-southeast - east - east-northeast. I3) Northwest - north-north-west - north - north-northeast - northeast. II) Without taking the thermal stratification into account. III) Group I. a) Altitude in meters. b) Measured value. c) Roughness. IV), V), VI) Groups II, III, and IV. VII) Mean value of roughness. The measured values of group I correspond to wind conditions at which, at a height of 0.75 m above the fundament of the mast, there is a wind velocity of up to 2.1 m/sec. Under analogous conditions the wind velocity of group II is 2.1 - 3.9 m/sec, that of group III 4.0 - 5.9 m/sec, while the wind velocity of group IV amounts to more than 6 m/sec.

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ACCESSION NR: AP4037557

s/0202/64/000/002/0027/0033

AUTHOR: Smirnova, N. P.

TITLE: The use of correlation analysis for decoding the wave pattern in recordings of local earthquakes

SOURCE: AN TurkmSSR. Izv. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 2, 1964, 27-33.

TOPIC TAGS: correlation analysis, earthquake recording, seismic wave, seismograph, seismogram, earthquake

ABSTRACT: The author investigated the wave pattern of longitudinal, composite, and transverse waves, as well as waves of a general nature, which were recorded seismographically by the Izgant, Kepele and Vannovskoye stations during the earthquake of 13 November 1961, and by the Sary\*-Kul' and Vannovskoye stations during the 13 June 1961 earthquake. The method of correlation analysis is based on determining the correlation coefficient which is contained in the linear dependence

$$\bar{y}_x = a + bx$$

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SOURCE CODE: UR/0202/66/000/003/0033/0037

ACC NR: AP7004556

AUTHOR: Lykov, V. I.; Smirnova, N. P.  
 ORG: Institute of Physics of the Earth and Atmosphere, AN Turkmen SSR (Institut fiziki Zemli i atmosfery AN Turkmen SSR)  
 TITLE: Value of the ratio of velocities of head waves from the Mohorovicic discontinuity

SOURCE: AN Turkmen SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 3, 1966, 33-37

TOPIC TAGS: earthquake, Mohorovicic discontinuity, upper mantle, seismogram

ABSTRACT:

Observations were made with "Zemlya" stations with intermediate magnetic recording and it has been found that they record local and near earthquakes in the frequency range 1-5 cps with a good accuracy. This article is concerned primarily with the determination of the ratio of the velocities of the P and S head waves from the Mohorovicic discontinuity. It was found that in the Ashkhabad region there is an anisotropy of about 10%; this factor must be taken into account when constructing travel-time curves and when determining coordinates of the focus when head waves from the Moho are used. Study of the behavior of the apparent velocities and the coefficient  $K_b$  (ratio of boundary velocities) made it possible to obtain the first data on the character of the Moho at the southern margin of the Predkopetdagskiy downwarp. Since there is an anisotropy in the  $K_b$  ratio it appears that the matter of the upper mantle is more anisotropic for one of the types of waves (for

UDC: 550.340

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ACC NR: AP7004556

longitudinal or transverse). Observations with "Zemlya" stations make it possible to determine the ratio of velocities with an accuracy to 1%. Such an accuracy is adequate for using this parameter not only as a kinematic criterion of waves, but also as a parameter of the medium. On the other hand, use of seismograms from stations of the general type requires a preliminary analysis of a large quantity of data. Orig. art. has: 2 figures. [JPES: 38,460]

SUB CODE: 08 / SUBM DATE: 15Nov65 / ORIG REF: 002

Card 2/2

SAPARGALIYEV, G.S., kand. yurid.nauk; PAL'GOV, N.N., akad.; BOGATYREV, A.S.;  
 AFANAS'YEV, A.V., prof.; BYKOV, B.A.; SHAKHMATOV, V.F., kand. istor.  
 nauk; POKROVSKIY, S.N., akad.; SAVOS'KO, V.K., kand. istor. nauk;  
 NUSUPBEKOV, A.F., kand. istor. nauk; BAISHEV, S.B., akad.; GOROKH-  
 VODATSKIY, I.S., kand. istor. nauk; AKHMETOV, A., kand. istor. nauk;  
 RAKHIMOV, A., kand. istor. nauk; PIVEN', N.F.; CHULANOV, G.Ch., doktor  
 ekonom. nauk; BOROVSKIY, V.A., kand. ekonom. nauk; SYDYKOV, A.S., kand.  
 pedagog. nauk; ZHANGEL'DIN, T., kand. filos. nauk; KARASAYEV, L.K.;  
 KANAPIN, A.K., kand. istor. nauk; BELENOV, M.D., kand. ekonom. nauk;  
 KARYNBAYEV, S.R., kand. med. nauk; AKHMETOV, K.A.; SMIRNOVA, N.S.,  
 doktor filolog.nauk; SIL'CHENKO, M.S., doktor filolog. nauk; YERZA-  
 KOVICH, B.G., kand. iskusstvovedcheskikh nauk; RYBAKOVA, N.; MUKHTA-  
 ROV, A.I.; BOGATENKOVA, L.I.; KUNDAKBAYEV, B.; SIRANOV, K.S.; SHVYD-  
 KO, Z.A., red.; MAMTSOVA, L.B., red.; ZLOBIN, M.V., tekhn. red.

[The Soviet Kazakh Socialist Republic] Kazakhskaya Sovetskaya So-  
 tsialisticheskaya Respublika. Alma-Ata, Kazakhskoe gos. izd-vo,  
 1960. 477 p. (MIRA 14:6)

1. Akademiya nauk Kaz.SSR (for Pal'gov, Pokrovskiy, Baishev)
2. Chlen-korrespondent Akademii nauk KazSSR (for Bykov, Smirnova,  
 Sil'chenko)

(Kazakhstan)

SMIRNOVA, N.S.

Calculation of wave fields near singular points. Part 2. Vop.din.  
teor.raspr.seism.voln no.7:77-87 '64. (MIRA 17:12)

Some examples of the calculation of theoretical seismograms. Ibid.:  
88-103

Call Nr: 1119002

SMIRNOVA, N S.

AUTHORS: See Table of Contents

TITLE: A Dynamic Theory of the Propagation of Seismic Waves  
(Voprosy dinamicheskoy teorii rasprostraneniya  
seismicheskikh voln) First Collection (Sbornik 1)

PUB. DATA: Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo  
neftyanoy i gorno-toplivnoy literatury, Leningrad-  
skoye otdeleniye, Leningrad, 1957, 386 pp., 1900  
copies.

ORIG. AGENCY: Ministerstvo neftyanoy promyshlennosti SSSR.  
Nauchno-issledovatel'skiy institut geofizicheskikh  
metodov razvedki (NIIGR)

EDITORS: Editors: Polshkova, M. K. and Petrashen', G. I.;  
Editor-in-Chief: Fedotova, M. I.; Tech. Ed.:  
Gennad'yeva, I. M.; Corrector: Segal', Z.G.

PURPOSE: This collection is intended for seismologists and  
particularly exploration seismologists and senior  
university and graduate students interested in geo-  
physics and in the theories of elasticity and  
acoustics.

Card 1/6

Call Nr: 1119002

A Dynamic Theory of the Propagation of Seismic Waves (Cont.)

lems in oil-bearing areas diminishes the efficiency of existing techniques. Therefore a careful study of these articles may lead to application of the dynamic theory described in interpreting seismograms. The first article (pp. 7-69) by Petrashen' discusses the most typical problems in wave propagation and the method of their solution. Simplification of the final formulas computed for the components of the fields of displacement is the main consideration. The second article by Petrashen' (pp. 70-163) describes the general quantitative theory of reflected and first-arrival waves. The third article, that by Petrashen' and Manukhov, considers wave intensities and data on the parameters required in composing theoretical seismograms. The fourth and fifth articles examine the method of composing such theoretical seismograms. The concluding articles examine wave propagation in an elastic semi-space. No personalities are mentioned; there are bibliographic references at the end of each article.

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- Call Nr; 1119002
- A Dynamic Theory of the Propagation of Seismic Waves (Cont.)
- Ch. IV. Smirnova, N. S., Tsepelev, N. V. Berdennikova, N.I.  
Composition of Theoretical Seismograms for Reflect-  
ed and First-Arrival Waves Propagated in Plane-  
parallel Media. 213-248
- No personalities are mentioned; there are 4  
references, all USSR.
- Ch. V. Malinovskaya, L. N. Composition of Theoretical  
Seismograms 249-282
- No personalities are mentioned; there are 5  
references, all USSR.
- Ch. VI. Manukhov, A. V. Exact Theoretical Seismograms for  
Wave Propagation in an Elastic Semi-space 283-295
- No personalities are mentioned; there are 3  
references, all USSR.
- Card 5/6

Call Nr: 1119002

A Dynamic Theory of the Propagation of Seismic Waves (Cont.)

Ch. VII. Ogurtsov, K. I., Uspenskiy, I. N. and Yermilova, N.I.  
Quantitative Investigations of Wave Propagation in  
the Simplest of Elastic Media

296-365

No personalities are mentioned; there are 5  
references, all USSR.

Ch. VIII. Some Explanations for the First Four Articles  
of this Collection

366-386

AVAILABLE: Library of Congress

Card 6/6



32485

S/044/61/000/010/051/051  
C111/C222

9,9865(1109)

AUTHORS: Smirnova, N.S., and  
Yermilova, N.I.

TITLE: On the construction of theoretical seismograms in the  
neighborhood of the origins

PERIODICAL: Referativnyy zhurnal. Matematika, no. 10, 1961. 57-58,  
abstract 10 V 330. ("Vopr. dinamich. teorii rasprostr.  
seysmich. voln." 3. L., Leningr. un-t, 1959, 161-213)

TEXT: The authors describe a method for the construction of theoretical  
seismograms of the reflected and the shock waves in the neighborhood of  
the origin. The authors give an assembly of the calculation formulas and  
discuss questions relating to the obtaining of the auxiliary functions  
appearing in the formulas. The appendices 1 and 2 of the paper contain  
tables. At first the functions

$$I_1(a) = \int_{-\infty}^{\infty} \sqrt{\xi - a} e^{-\xi^2} d\xi, \quad I(a) = \int_a^{\infty} \sqrt{\xi - a} e^{-\xi^2} d\xi$$

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C111/C222

On the construction of theoretical ...

are tabulated, where  $a = |a| e^{-\frac{\pi i}{4}}$ , and the branch of the root is determined by the condition  $\arg \sqrt[3]{g - a} = -\frac{5}{8}\pi$  for  $g = 0$ . These functions satisfy the equation  $y''(a) + 2ay'(a) - y(a) = 0$  for the initial conditions

$$I_1(0) = -\frac{2}{3}\Gamma(1.75)(1+i), I(0) = -\frac{2}{3}\Gamma(1.75) \quad +$$

$$I_1'(0) = \Gamma(1.25)(1-i), I'(0) = \Gamma(1.25) \quad +$$

The table I contains values of  $|I_1(a)|$ ,  $|I(a)|$ , as well as values of

$$\Psi_1(a) = \frac{5}{8}\pi + \arg I_1(a), \Psi(a) = -\frac{3}{8}\pi + a^2 + \arg I(a) \text{ with three}$$

decimals for  $|a| = 0.00(0.01) 1.00 (0.10) 5.00$ . The table II contains values of

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On the construction of theoretical ...

$$\Phi^+(\tau, r) = \frac{1}{2\pi} \int_{-\infty}^{\infty} \frac{-a_{\omega}(T) - ib_{\omega}(T)}{\omega} F_1 e^{i\omega\tau} d\omega,$$

$$\Psi^+(\tau, r) = \frac{1}{2\pi} \int_{-\infty}^{\infty} \frac{L_{\omega}(T) - ia_{\omega}(T)}{\omega} F_2 e^{i\omega\tau} d\omega,$$

where

$$F_1 = \begin{cases} \frac{|I_1(c\sqrt{\omega})|}{|\omega|^{1/4}} e^{i\psi_1(c\sqrt{\omega})}, & \omega > 0, \\ \frac{|I_1(c\sqrt{-\omega})|}{|\omega|^{1/4}} e^{-i\psi_1(c\sqrt{-\omega})}, & \omega < 0, \end{cases}$$

$$F_2 = \begin{cases} \frac{|I_1(c\sqrt{\omega})|}{|\omega|^{1/4}} e^{i\psi_1(c\sqrt{\omega})}, & \omega > 0, \\ -\frac{|I_1(c\sqrt{-\omega})|}{|\omega|^{1/4}} e^{-i\psi_1(c\sqrt{-\omega})}, & \omega < 0, \end{cases}$$

Card 3/4

SMIRNOVA, N.S.

37851

S/080/62/035/005/014/0:5  
B247/D307

AUTHORS:

Osob, Ya. N., Skvortsova, Ye. V., Vyshemirskiy, V. S.,  
Alfarova, G. V., Klyushnikova, G. G. and Smirnova,  
N. S.

TITLE:

Polymerization of the butane-butene fraction of crack-  
ing gases on a phosphoric acid film catalyst

ABSTRACT:

Zhurnal prikladnoy khimii, v. 35, no. 5, 1962,  
1148-1150

Summary: Various carriers for films of phosphoric acid, based on na-  
tural silica, were investigated. The film catalysts were prepared  
directly on the base of ground quartz of sands treated with HF.  
The reaction was carried out under constant flow conditions. An  
increase in pressure from atmospheric to 40 - 50 atm was found to  
result in lower efficiency of the polymerization process. A series  
of coarse-grained sands were also prepared as carriers to investi-  
gate the effects of impurities and of specific grain surfaces. Re-  
sults, expressed as the yield of diisobutylene polymer as a per-  
cent of the initial amount of catalyst, are given.

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5247/5607

... of the ...

... of the butenes present and as grams per liter of the car-  
... hour, are given for a series of carriers for the film  
... and for various times for the reaction. Optimum conditions  
... process were found to be (at atmospheric pressure): a tem-  
... of 175 - 185°C, an input rate of 75 hour<sup>-1</sup> for the reac-  
... and a periodical addition of fresh phosphoric acid for the  
... at the rate of 0.5 - 0.7% of the original quantity per  
... After working for 50 hours under these conditions, the ac-  
... and yields using films on quartz became comparable with  
... obtained with the industrial catalyst (phosphoric acid on  
...). Sand- or quartz-based catalysts were easier to rege-  
... or aqueous washing and air or steam and air blowing than  
... industrial catalyst. Acid-resistant steel used as a reactor  
... did not effect the reaction. There are 2 figures.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet imeni N. G.  
Chernyshevskogo (Saratov State University imeni N. G.  
Chernyshevskiy)

SUBMITTED: April 10, 1961

Card 2/2

SMIRNOVA, N.S.

Calculation of wave fields in the vicinity of anodes. Pt. 1.  
Vop. din. teor. raspr. seism. voln no.6:30-59 '62. (MIRA 16:7)  
(Seismic waves)

SMIRNOVA, N. S.; VOLKOV-PIBROVIN, V. F.

"O stepeni svyazi nekotorykh morfologicheskikh i funktsional'nykh pokazateley  
v grunnye vzroslogonaseleniya (v svyazi s izucheniym konstitutsii cheloveka)."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,  
Moscow, 3-10 Aug 64.

SMIRNOVA, N. S.

"The types of structure of monocotyledonous seeds."

report submitted for 10th Intl Botanical Cong, Edinburgh, 3-12 Aug 64.

Botanical Garden, AS USSR.



MIKHNEV, A.L.; KHOMAZYUK, A.I.; KOCHENASOVA, N.G.; KUZMINSKY, N.P.,  
SMIRNOVA, N.S.; NESHCHET, A.P.

Disorders in circulatory regulation in experimental  
atherosclerosis in dogs. Trudy Inst. klin. i eksper. kar.  
AN Gruz. SSR 8:181 186 '63. (MIRA 1967)

1. Ukrainskiy institut klinicheskoy meditsiny imeni akademika  
N.D. Strazhesko, Kiev.

L 16174-66 EWT(m)/EWP(j)/T WW/JW/WE/RM  
ACC NR: AP5025348 SOURCE CODE: UR/0366/65/001/010/1868/1871

AUTHOR: Chegolya, A. S.; Smirnova, N. S.; Zhizdyuk, B. I.; Ryzhenko, L. M.;  
Golub, G. I.; Ponomarev, A. A.

ORG: Saratov State University im. N. G. Chernyshev (Saratovskiy gosudarstvennyy universitet)

TITLE: Hydrogenation of aromatic amines on ruthenium catalysts

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 10, 1965, 1868-1871

TOPIC TAGS: hydrogenation, aromatic nitro compound, primary aromatic amine, catalysis, aniline, ruthenium

ABSTRACT: Aniline and m- and p-phenylenediamine (I) were hydrogenated in liquid phase on Ru catalysts at 100-170C to give cyclohexane analogs. All of the Ru catalysts tested gave satisfactory results, however, the rate of hydrogenation decreased in the order  $RuO_2 > Ru-C > Ru-silica$  gel. The presence of an additional

Card 1/2

UDC: 542.541 : 547.551/3 : 546.96

L 16174-66

ACC NR: AP5025348

0  
amino or nitro group on the aromatic ring slowed down the reaction. Hydrogenation of I at 80 atm. H. pressure occurred faster in polar solvents (H<sub>2</sub>O, MeOH) than in solvents of lower polarity (EtOH, PrOH, n-amyl alcohol, or dioxane). In a typical experiment, the catalyst was placed in a rotating autoclave, the aromatic amine added in a 3-10-fold amount of solvent, the autoclave pressurized with electrolytic H to 110 atm. and heated in an electric oven. After the H absorption was finished, the catalyst was filtered off, the solvent eliminated, and the residue distilled in vacuo. The hydrogenation of I is highly stereospecific and yields almost exclusively trans-1,4-diaminocyclohexane. Orig. art. has: 2 figures and 1 table.

SUB CODE: 07 / SUBM DATE: 09Nov64/ ORIG REF: 007/ COTH REF: 005

Card 2/2 *gc*

SMIRNOVA, N.S.; CHECOLYA, A.S.; PONOMAREV, A.A.

Hydrogenation of some aromatic acids and their derivatives  
on ruthenium catalysts. Zhur. org. khim. 1 no.8:1422-1425  
Ag '65. (MIRA 18:11)

1. Saratovskiy gosudarstvennyy universitet imeni Chernyshevskogo.

L 52535-65 EWT(1)/EWA(h) Feb GW  
ACCESSION NR: AT5012710

UR/2585/64/000/007/0077/0087

19  
B4

AUTHOR: Smirnova, N.S.

TITLE: The calculation of wave fields in the vicinity of singular points. II

SOURCE: Voprosy dinamicheskoy teorii rasprostraneniya seismicheskikh voln, no. 7, 1964, 77-87

TOPIC TAGS: wave field calculation, wave field singular point, near singularity wave field, wave propagation, stationary phase method

ABSTRACT: This article deals with the calculation of wave fields in the vicinity of singular points and is a continuation of a paper published in the preceding issue of the same symposium series (Voprosy dinamicheskoy teorii rasprostraneniya seismicheskikh voln, no. 6, 1962, Izd. LGU). It formulates and gives the results of the study of the applicability of the simple and certain improved versions of the stationary phase method as proposed in the first part, and discusses the range of applicability of the proposed computational method for the calculation of wave fields in multilayer media (especially in the case of boundaries with small velocity and density discontinuities); the strong discontinuity case was treated earlier (N.S. Smirnova, N.I. Yermilova, Voprosy dinamicheskoy teorii rasprostraneniya seismicheskikh voln, no. 3, 1959, Izd. LGU). Orig. art. has: 46 formulas  
Card 1/2

L 52535-65

ACCESSION NR: AT5012710

and 8 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: ES, ME

NO REF SOV: 005

OTHER: 001

Card

*lla*  
2/2

POPOVA, A. I., and A. S. SMIRNOVA. 1964.

Two-phase hydrogenation of some unisubstituted aromatic compounds in the presence of ruthenium catalysts. Dokl. AN SSSR 163 no. 2:379-382 (MIRA 18:7) 1964.

1. Leningradskiy gosudarstvennyy universitet im. N.G.Chernyshevskogo, submitted November 9, 1964.

N. T. SMIRNOVA and S. M. LEVITS

"On the effect of the antidiabetic preparation EZ-55"

The Chemistry and Metabolism of Carbohydrates in Animal and Plant Organisms.  
Conference in Moscow. January 28 to January 30 1958.

(BA) 1-77-61 No. 2, 58.



ACCESSION NR: AT4040006

S/2789/63/000/051/0014/0019

AUTHOR: Gayvoronskiy, I. I.; Krasnovskaya, L. I.; Seregin, Yu. A.; Smirnova, N. V.

TITLE: The problem of the temperature limits of applicability of the method of artificial modification using solid carbon dioxide

SOURCE: Tsentral'naya aerologicheskaya observatoriya. Trudy\*, no. 51, 1963, 14-19

TOPIC TAGS: meteorology, weather modification, fog, cloud, fog modification, cloud modification, solid carbon dioxide, ice crystal, cloud seeding, dry ice, supercooled cloud, ice formation

ABSTRACT: Information on the temperature limits of effectiveness of solid carbon dioxide as a reagent for the artificial modification of the phase state of supercooled fogs and clouds is contradictory, as demonstrated a review of the Soviet and western literature on this subject. This article therefore reports on theoretical and experimental investigations to resolve this question. The authors used the theory of homogeneous condensation in saturated vapor to study the generation of ice crystal nuclei at different temperatures. A previously derived formula (L. I. Krutskaya, Trudy TsAO, No. 19, 1958) is cited which gives the rate of formation of nuclei of the new phase at the time of introduction of solid carbon dioxide into a supercooled cloud; this formula was used in computing the quantity of nuclei of the

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ACCESSION NR: AT4040006

new phase formed under different conditions. It is shown that the generation of nuclei of ice crystals in a cold chamber and in the atmosphere changes in conformity to different laws. For example, at a temperature of  $-4^{\circ}\text{C}$  the effectiveness of  $\text{CO}_2$  in a cold chamber is two orders of magnitude less than at  $-10^{\circ}\text{C}$ . In natural clouds, when granules of  $\text{CO}_2$  are seeded from an aircraft, the generation of ice crystal nuclei remains quite intense to  $-1^{\circ}\text{C}$ . As a result, the production of a large number of ice crystal nuclei in supercooled clouds and fogs is possible down to temperatures of several tens of degrees below zero. However, to obtain the same effect on the microstructure at a higher temperature, it is necessary to have a higher concentration of propagating crystals. At high temperatures the width of the zone forming from one pass of the aircraft will be smaller than at lower temperatures. Various specific experiments and groups of experiments are described in detail. The following were the general conditions: vertical thickness of clouds and fogs - 100 to 1,000 m; air temperature at upper cloud boundary -  $+0.5$  to  $-4.9^{\circ}\text{C}$ ; temperature at lower boundary - 0 to  $-8.1^{\circ}\text{C}$ ; wind velocity in the cloud or fog layer - not in excess of 3 m/sec. The experiments revealed that it is possible to modify (disperse) clouds and fogs at temperatures as low as  $-2^{\circ}\text{C}$ . The experiments were made at Alma Ata, Frunze and Dzhambul and made it possible to keep the airports at those cities free of fogs and low clouds. It is noted that further work must be done to determine the influence of wind on artificial modification of fogs and clouds and the modification of clouds and fogs associated with frontal processes.

2/3

ACCESSION NR: AT4040006

Orig. art. has: 9 formulas, 1 figure and 3 tables.

ASSOCIATION: Tsentral'naya aerologicheskaya observatoriya (Central Aerological Observatory)

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 001

OTHER: 0.2

Card: 3/3

KIRPICHNIKOV, M.E.; LEBEDEV, D.V.; SMIRNOVA, N.V.

Aleksandr Al'fonsovich Grossgeim, 1888-1948. Moskva, Izd-vo Akad.nauk SSSR, 1953. 127 p. (MIRA 6:11)

(Grossgeim, Aleksandr Al'fonsovich, 1888-1948)

(Bibliography--Grossgeim, Aleksandr Al'fonsovich, 1888-1948)

(Grossgeim, Aleksandr Al'fonsovich, 1888-1948--Bibliography)

(Caucasus--Botany) (Botany--Caucasus)

CHERNUKHIN, A.Ye., inzh., red.; ASHKENAZI, E.L., red.; YEFREMOVA, M.K.,  
red.; IVANOV, N.F., red.; KRASNOBRODSKAYA, L.L., red.;  
MOSHENTSEVA, I.I., red.; KHANDIN, V.Ye., red.; BEL'CHUK, V.I.,  
mladshiy red.; KOMAROVA, Ye.B., mladshiy red.; SMIRNOVA, N.V.,  
mladshiy red.; KIMYROVA, I.I., mladshiy red.; BRUDNO, K.F.,  
tekhn. red.; KOLESNIKOVA, A.P., tekhn. red.

[English-Russian technical dictionary] Anglo-russkii politekhnicheskii slovar'. Moskva, Glav. red. inostr. nauchno-tekhn. slovarei Fizmatgiza, 1962. 663 p. (MIRA 15:11)  
(English language--Dictionaries--Russian)  
(Technology--Dictionaries)

SMIRNOVA, N.V.

Scientific activity of the Botany Department of the Krivoy Rog State  
Pedagogical Institute. Bot.zhur.[Ukr.] 11 no.1:116 '54. (MIRA 8:7)  
(Krivoy Rog--Botany--Study and teaching)

SMIRNOVA, N.V.

USSR/Meadow Cultivation.

L.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 95392

Author : Khrebtov, N.S., Smirnova, N.V.

Inst : Buryat-Mongol State Agricultural Experimental Station

Title : Irrigation System and the Influence of Different Types  
and doses of fertilizers on Irrigated Meadows.

Orig Pub : Tr. Buryat-Mong. gos. s.-kh. opytn. st., 1957, vyp. 2,  
65-80

Abstract : No abstract.

Card 1/1  
1226

E N D

SMIRNOVA, N.V.

ARENDAK, A.P.; BUDOVSKIY, E.I.; GOTTIKH, B.P.; KARPEYSKIY, M.Ya.  
KUDRYASHOV, L.I.; SKOLDINOV, A.P.; SMIRNOVA, N.V.; KHORLIN, A.Ya.  
KOCHETKOV, N.K.

Dihydrosarcomycin and related compounds. Part 1. Zhur.ob.khim.  
27 no.5:1312-1318 My '57. (MLRA 10:8)

1. Institut farmakologii i khimioterapii Akademii meditsinskikh  
nauk SSSR.

(Antibiotics)



SMIRNOVA, H.Y., ARJENDARUK, A.P., SNOLIN, D.D., SKOLDINOV, A.P.

Esters of N-(arylalkyl)-4-phenylisonipectic acid. Med.prom.12 no.7  
31-35 J1 '58 (MIRA 11:8)

1. Institut farmakologii i khimioterapii AMN SSSR.  
(N IPECOTIC ACID)

KLIMKO, V.T.; PROTOPOFOVA, T.V.; SMIRNOVA, N.V.; SKOLDINOV, A.P.

Functional derivatives of malonodialdehyde and their reactions.  
Part 12: Preparation of  $\beta$ -alkoxyacroleins. Zhur.ob.khim. 32  
no.9:2961-2966 S '62. (MIRA 15:9)

1. Institut farmakologii i khimioterapii AMN SSSR.  
(Acrolein)

GROMOV, I.M.; GUREYEV, A.A.; NOVIKOV, G.A.; SOKOLOV, I.I.; STRELKOV,  
P.P.; CHAPSKIY, K.K.; PAVLOVSKIY, Ye.N., akademik, glav.  
red.; BYKHOVSKIY, B.Ye., red.; MONCHADSKIY, A.S., red.;  
SKARLATO, O.A., red.; SHTAKEL'BERG, A.A., red.; SMIRNOVA,  
N.V., red.; SMIRNOVA, A.V., tekhn. red.

[Mammals of the U.S.S.R.] Mlekopitaiushchie fauny SSSR.  
Sost. I.M.Gromov i dr. Moskva, Izd-vo AN SSSR. Pts.1-2. 1963.  
(MIRA 16:9)

1. Akademiya nauk SSSR. Zoologicheskii institut.  
(Mammals)

SMIRNOVA, N.V.

3(7)

PHASE I BOOK EXPLOITATION

SOV/1880

Leningrad. Glavnaya geofizicheskaya observatoriya

Mikroklimat severnoy chasti Kazakhskogo melkosopohnika (Microclimate of the Northern Part of the Kazakh Hummocky Region) Leningrad, Gidrometeoizdat, 1958. 207 p. Errata slip inserted. 800 copies printed.

Sponsoring Agency: Glavnoye upravleniye gidrometeorologicheskoy sluzhby pri Sovete Ministrov SSSR.

Ed. (Title page): I.A. Gol'tsberg, Doctor of Geographical Sciences;  
Ed. (Inside book): V.D. Pisarevskaya; Tech. Ed.: N.V. Volkov,

PURPOSE: This book is intended for meteorologists, agronomists, workers on collective farms, and the interested layman.

COVERAGE: This book provides a climatic description of the Kazakh "Melkosopohnik" (hummocky region). It lists the results of studies

Card 1/8

Microclimate of the Northern Part (Cont.)

SOV/1880

made on the microclimate of the region. Individual chapters deal with the physical phenomena underlying and shaping the microclimatic features, and the effect the latter have upon the region's agriculture. The work was prepared by members of the GGO and the KazNIGMI. A map on the recurrence of drought was drawn up by Doctor of Agricultural Sciences A.M. Alpat'yev and scientific worker A.I. Trofimova of the Vsesoyuznyy institut rasteniyevodstva. Ye.I. Kuznetsova worked on data dealing with the temperature of the active slopes of Li Pkhil' En and the changes in prevailing air currents brought about under the influence of relief. The chart showing the amount of precipitation during the warm period of the year was drawn up by L.P. Kuznetsova under the direction of Doctor of Geographical Sciences O.A. Drozdov (GGO). There are 89 references of which 81 are Soviet, 6 German, 1 French, and 1 English.

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Weather Characteristics During the Period of the Expedition's Activities (N.V. Smirnova) 11
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SOV/1880

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Ch. VI. The Effect of the Relief of the Hummocky Region on  
the Agrometeorological Conditions of Growth and De-  
velopment of Agricultural Crops and Natural Herbs  
Agrometeorological Conditions of Growth and Development of  
Plants (A.P. Fedoseyev and G.G. Beloborodova) 149  
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Ch. VII. The Agroclimatic Features (I.A. Gol'tsberg)  
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the Kolkhoz im. Kirov, Aryk-Balykskiy rayon, Kokchetavskaya  
oblast' 176

Bibliography 183

Card 5/8



KURANOVA, I.P.; SMIRNOVA, N.V.

Preparation of Ph-iodogramycin S. Izv. AN SSSR. Otd.khim.nauk  
no.6:1148 Je '63. (MIRA 16:7)

1. Institut kristallografii AN SSSR.  
(Antibiotics)

GAYVONSKIY, I. I.; KRASNOVSKAYA, L. I.; SEREGIN, Yu. A.; SMIRNOVA,  
N. V.

Temperature limits of the applicability of the method of  
artificial reaction using solid carbonic acid. Trudy TSO  
no. 51:14-19 '63. (MIRA 17:5)

DATE RECEIVED \_\_\_\_\_

...and hydraulic derivatives ... ..  
... ..  
... ..  
... ..  
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... ..

(MAR 198)

2. To develop and disseminate information about the importance of family  
planning and reproductive health.

SMIRNOVA, N. V.

"Type of Cement and the Influence of Cementation Upon the Collector Properties of Sandy Rocks"

Tr. Vses. Neftegazovogo n.-i. in-ta, No 4, 125-126, 1954

The author considers the problem of the influence of textural types of cement and percentage composition of cement upon the collector properties of fine-grain quartz sandstones of the productive horizons of the gas deposits in the West Ukraine. He selects the principal and intermediate textural types with uniform and nonuniform distribution of cement among the grains.  
(RZhGeol, No 6, 1954)

SO: Sum. 492, 12 May 55

SMIRNOVA, N.V.

New data obtained from comparing cross sections of the Ugersko  
series in the Carpathian Mountain region. Trudy VNII no.11:65-83  
'57. (MLRA 10:11)  
(Carpathian Mountain region--Petroleum geology)

SOV/9-59-7-7/15

3(5)

AUTHOR: Smirnova, N.V.

TITLE: Cement Types and Their Effect on Permeability of Sandy Rocks

PERIODICAL: Geologiya nefti i gaza, 1959, Nr 7, pp 33 - 39 (USSR)

ABSTRACT: Collecting properties of oil and gas bearing sand horizons are often subjected to changes due to the different degrees of cementation of rocks. The regularity of such changes can be established by investigating the cements of collecting rocks. Until the present a summary composed by M.S. Shvetsov on cement characteristics had served as a basis for work with elastic rocks. The author of the present article carried out a detailed subdivision of cement types according to correlations between the cement and the grains. There are two groups, i.e. uniform and non-uniform cements. The first group includes the pellicular, contact, porous, incomplete porous and basal types. Non-uniform cements are divided into two subsections including mixed and clotted types. Characteristics of the different cement types are given in a table and are illustrated by diagrams and microphotos. The effect of the cement content on the porosity and permeability of sandstone was investigated and it was stated that regular inversely proportional

Card 1/2

Cement Types and Their Effect on Permeability of Sandy Rocks

SOV/9-59-7-7/15

correlations between permeability and content of cement could be determined only within each of the aforementioned groups and not in general. Data obtained proved that the cement content in sandy gas and oil collectors can vary from the fraction of a per cent to 4%, according to the type of cement. Sandstone and aleurolites with basal, basal-porous, porous-basal and porous cements cannot form collectors. All other types analyzed can serve as oil and gas collectors. It is concluded that the described investigation of cement types permits to estimate the collecting indicators of sandy and aleurolite rocks and explains regularities in their change.

There are: 1 table, 2 diagrams, 1 set of microphotos, 1 graph and 2 Soviet references.

ASSOCIATION: Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR (Institute of Geology and Exploitation of Mineral Fuels of AS USSR)

Card 2/2

SMIRNOVA, N.V.

Types of cements in sandstones and siltstones. Trudy Inst. geol.  
i razrab. gor. iskop. 1:247-259 '60. (MIRA 14:1)  
(Rocks, Sedimentary)



SMIRNOVA, N.V.

Relationship between silification and the reservoir properties  
of Devonian sandstones in the Volga-Ural region. Geol. nefi  
i gaza 5 no.7:38-42 J1 '61. (MIRA 14:9)

1. Institut geologii i razrabotki goryuchikh iskopayemykh.  
(Volga-Ural region--Oil sands--Permeability)  
(Porosity) (Quartz)

SMIRNOVA, N.V., kand. khim. nauk

Silicon organic compounds. Put' 1 put. khoz. 8 no.7:  
34-35 '64. (MIRA 17-10)

1ST AND 2ND GROUPS										PROCESSES AND PROPERTIES INDEX									
<p>BC</p>										<p>A-3</p>									
<p>Hydrogenation of aromatic hydrocarbons by means of calcium-ammonia. B. A. KARANSKI and N. V. SHARSTOVA (Bull. Acad. Sci. U.R.S.S., Ser. Chem., 1957, 647-654).—H<sub>2</sub>-derivatives are obtained by passing C<sub>6</sub>H<sub>6</sub>, PhMe, C<sub>6</sub>H<sub>5</sub>, or A<sup>1</sup>is. cyclohexadiene through a layer of Ca-NH<sub>3</sub> at 0°.</p> <p>R. T.</p>																			
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>										<p>22-100-1000</p>									
<p>1ST GROUP</p>										<p>2ND GROUP</p>									
<p>1ST GROUP</p>										<p>2ND GROUP</p>									

10

Acetylsalicylic acid. A. P. Skoklinov, N. V. Smirnova, and D. D. Smolin. U.S.S.R. 66,320, May 31, 1946. Salicylic acid is acetylated with ketene until mixed anhydrides of acetylsalicylic and acetic acid are obtained. The mixed anhydrides are then treated in an inert solvent with an equiv. quantity of salicylic acid. M. Hoesch

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

COMMON ELEMENTS

MATERIALS INDEX

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

STONY POWDER

STONY POWDER



SMIRNOVA, N.V.

"On the Reaction of Ketene With the Amides of Carboxylic Acids. " Thesis for degree of Cand. Chemical Sci. Sub 28 Jun 50, Moscow Order of Lenin State U Imeni M. V. Lomonosov

Summary 71, 4 Se. 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva, Jan-Dec. 1950

232T10

SMIRNOVA, N. V.

USSR/Chemistry - Triacylnitrogen 1 Jun 52  
"Preparation of Compounds of the Triacylnitro-  
gen Type," N.V. Smirnova, A.P. Skoldinov, K.A.  
Kocheshkov, Corr Mem, Acad of Sci SSSR, All-  
Union Sci Res Chem-Phar Inst Imeni S. Ordzhoni-  
kidze

"Dok Ak Nauk SSSR" Vol 84, No 4, pp 737-740

Ketene reacts with amides in the presence of  
an inorg acid to form N-acetyl substituted  
amides. Further action of ketene on the dia-  
cetyl amide leads to the formation of compd  
having 3 acetyl groups on one nitrogen atom.

232T10

This compd is a representative of a new class  
of compds of the type  $N(COR)_3$  where R is an  
aliphatic radical. Nine compds of this series  
were prepd and tabulated with their phys consts.

232T10

BEKOV, S.D., prof.; SMIRNOVA, N.V., red.; PONOMAREVA, A.A., tekhn. red.

[Programs of pedagogical institutes; analytical chemistry for  
natural science faculties] Programmy pedagogicheskikh institutov;  
analiticheskaya khimiya dlia fakul'tetov estestvoznaniia. Moskva,  
Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1955. 15 p.  
(MIRA 11:9)

1. Russia (1917- R.S.F.S.R.) Glavnoye upravleniye vysshikh i  
srednikh pedagogicheskikh uchebnykh zavedeniy.  
(Chemistry, Analytical--Study and teaching)



SHCHUKIN, Ye.D.; SMIRNOVA, N.V. \_\_\_\_\_

Initial plastic deformation of metal crystals. Kristallografiia  
6 no.5:787-789 S-0 '61. (MIRA 14:10)

1. Institut fizicheskoy khimii AN SSSR.  
(Deformations (Mechanics)) (Metal crystals)

ACC NR: AP6025393

SOURCE CODE: UR/0366/66/002/007/1261/1265

AUTHOR: Smirnova, N. V.; Skoldinov, A. P.

ORG: Institute of Pharmacology and Chemotherapy, Academy of Medical Sciences, SSSR  
(Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR)

TITLE: Oligomeric N-methylated amides and amines. I. Sarcosine derivatives

SOURCE: Zhurnal organicheskoy khimii, v. 2, no. 7, 1966, 1261-1265

TOPIC TAGS: polyamide, oligomeric amide, oligomeric amine, peptide synthesis,  
OLIGOMER, POLYAMINE, COMPOUND, CHEMICAL SYNTHESIS,  
ABSTRACT: METHYLATION, ORGANIC AMIDE, AMINE

To determine the relation between structure and biological activity, it appeared of interest to investigate synthetic routes to various polyfunctional compounds with repeating N-alkylamido and N-alkylamino groups, since, in some cases, accumulation of such polar groups leads to enhancement of pharmacological activity. Employing methods of peptide synthesis (method of mixed anhydrides, trityl protection of terminal amino group) oligomeric polyamides of the type  $\text{CH}_3[\text{N}(\text{CH}_3)\text{CH}_2\text{CO}]_n\text{N}(\text{H}_3)_2$ , where  $n = 1, 2, 3$ , were synthesized, as well as the polyamines resulting from their reduction.

[W.A. 50; CBE No. 10]

SUB CODE: 07/ SUBM DATE: 15Jul65/ OTH REF: 007/

Card 1/1

UDC: 547.298.1

ACC NR: AP6025394

SOURCE CODE: UR/0366/66/002/007/1269/1272

AUTHOR: Smirnova, N. V.; Skoldinov, A. P.

ORG: Institute of Pharmacology and Chemotherapy, Academy of Medical Sciences, SSSR  
(Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR)

TITLE: Oligomeric N-methylated amides and amines. II Isoindoly-N-ethylethylene-diamines

SOURCE: Zhurnal organicheskoy khimii, v. 2, no. 7, 1966, 1269-1272

TOPIC TAGS: oligomeric amine, protein synthesis, polypeptide isoindole derivative, oligomer, chemical synthesis, amine

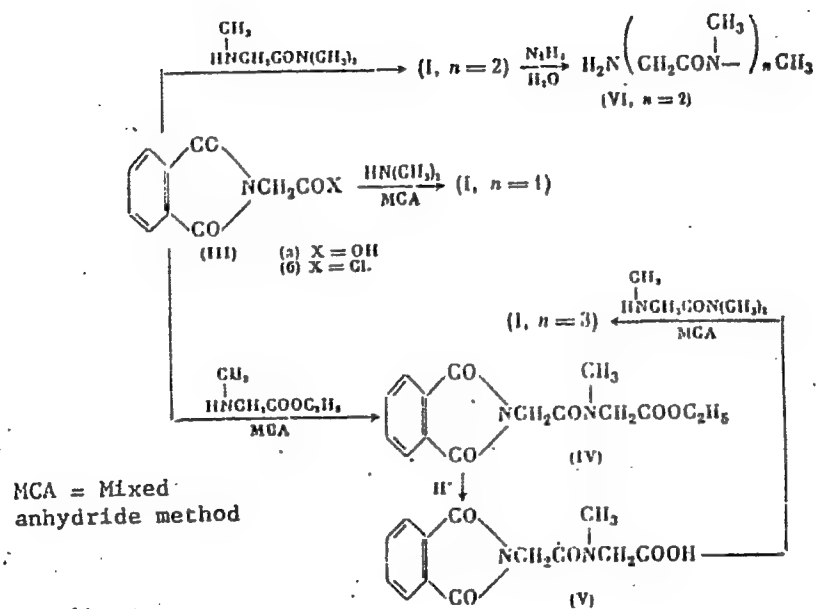
ABSTRACT:

Continuing the work on the synthesis of oligomers containing repeating N-methyl fragments, a number of oligomers were synthesized, which incorporated isoindolyl groups. Sarcosine units were attached to glycine, employing phthalyl protection of the terminal amino group. Reduction

Card 1/3

UDC: 547.298.1

ACC NR: AP6025394



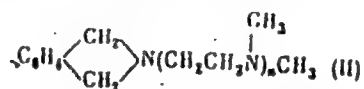
MCA = Mixed anhydride method

Card 2/3

ACC NR: AP6025394

with lithium aluminum hydride yielded exhaustively methylated oligomeric amines.

Table 1. Oligomeric amines



n	Yield (%)	bp (mm)	n <sub>D</sub> <sup>20</sup>	R <sub>f</sub>	Found-X			Formula	Calculated X			Methiodides					
					C	H	N		C	H	N	mp (decomp.)	Found X		formula	Calculated X	
													J	N		J	H
1	89.0	88-90° (0.06)	1.5226	0.37	75.75	9.18	11.51	C <sub>11</sub> H <sub>17</sub> N <sub>2</sub>	75.74	9.33	11.72	225-236° (ethanol)	53.92	5.61	C <sub>11</sub> H <sub>17</sub> N <sub>2</sub>	54.33	5.99
2	70.8	118-117 (0.04)	1.5177	0.41	72.50	10.12	16.66	C <sub>13</sub> H <sub>21</sub> N <sub>3</sub>	72.76	10.19	16.83	182-183 (methanol)	57.08	6.19	C <sub>13</sub> H <sub>21</sub> N <sub>3</sub>	56.55	6.24
3	67.0	148-150 (0.05)	1.5150	0.31	70.70	10.47	18.12	C <sub>15</sub> H <sub>25</sub> N <sub>4</sub>	71.00	10.51	18.40	178-179 (80% ethanol)	58.03	6.49	C <sub>15</sub> H <sub>25</sub> N <sub>4</sub>	58.21	6.42
					70.65	10.58	18.68						57.90	6.66			

Orig. art. has: 1 table.

[W.A. 50; CBE No. 10]

SUB CODE: 07/ SUBM DATE: 15Jul65/ ORIG REF: 001/ OTH REF: 003/

Card 3/3

EXCERPTA MEDICA Sec 2 Vol 12/7 Physiology July 59

2738. THE SURFACE TENSION OF BILE (Russian text) - Smirnova O. A.  
Chair of Biol. Chem., 'S.M. Kirov' Med. Inst., Gorky, USSR - VOPR. MED.  
KHIMII 1958, 4/3 (204-207) Graphs 3 Tables 1

Two to 8-fold dilution of human bile and duodenal contents effects a decrease in surface tension. Further dilution (16- to 64-fold), on the other hand, is followed by a rise. It is suggested that the bile acids may be 'bound' to protein, and that the changes of surface tension on gradual dilution are determined by the initial concentrations of free and 'bound' bile acids.

Edward - Montreal

SMIRNOVA, O.A.

Effect of ionizing radiation on phosphatide metabolism in the  
brain. Ukr. biokhim. zhur. 33 no.2:208-214 '61. (MIRA 14:4)

1. Kafedra biologicheskoy khimii Gor'kovskogo meditsinskogo instituta  
im. S.M.Kirova.

(PHOSPHATIDES)

(X RAYS--PHYSIOLOGICAL EFFECT)

(BRAIN)

SOV/133-59-9-25/31

AUTHORS: Isupov, V.F., Smirnova, O.A. and Saar, T.M.

TITLE: Causes of the Formation of Surface Defects on Billets and Finished Products

PERIODICAL: Stal', 1959, Nr 9, pp 842-845 (USSR)

ABSTRACT: An investigation of the influence of surface defects in ingots and billets on the surface quality of finished products was investigated using radioactive indicators. The method consisted of marking surface defects in ingots and billets with radioactive  $Ag^{110}$ . The marking was done by drilling holes 16 to 18 mm in diameter and 40 to 50 mm deep on two sides of the defect in the direction of rolling and placing 0.10 - 0.08 mCurie of the radioactive marker (a mixture of an aqueous solution of  $Ag^{110}NO_3$  with dextrin and charcoal made into pellets and dried) and closing the hole with a steel stopper, electrically welded on the surface. After rolling the ingots into blooms and billets, the position of the markers was determined and transverse templates were cut out from the section between the markers for studying the microstructure and the depth of penetration of the defects. A similar procedure was adopted for marking

Card 1/2



SMIRNOVA, O.I., kandidat meditsinskikh nauk

Sanitary instruction in Tamboff schools. Gig. i san. 22 no.2:50-53  
(MLRA 10:4)

F '57

1. Iz Tambovskogo pedagogicheskogo instituta i oblastnogo Doma  
sanitarnogo prosveshcheniya.

(SANITATION, educ.  
in Russia)

SMIRNOVA, O.I., dot sent

Some immunological indices in children who sleep out of doors  
during the fall-winter season. Med. zhur. Uzb. no.1:81 Ja '62.  
(MIRA 15:3)

1. Iz Namanganskogo filiala (direktor - R.P. Pulatov)  
Uzbekskogo nauchno-issledovatel'skogo protivotuberkuleznogo  
instituta.

(OPEN-AIR TREATMENT)  
(CHILDREN--CARE AND HYGIENE)  
(SLEEP)

SMIRNOVA, O. I., dotsent; PULATOV, R. P., dotsent

Reactive changes in the body in pulmonary tuberculosis during the use of chemotherapy under conditions of a measured work regimen. Probl. tub. 40 no.4:40-50 '62. (MIRA 15:6)

1. Iz Namanganskogo filiala (dir. - dotsent R. P. Pulatov)  
Instituta tuberkuleza Ministerstva zdravookhraneniya Uzbekskoy  
SSR (dir. - prof. Sh. A. Alimov)

(TUBERCULOSIS) (CHEMOTHERAPY)  
(OCCUPATIONAL THERAPY)

SMIRNOVA, O.I.

Map of the headwaters of the Zeravshan dating to the first quarter  
of the eighth century. Strany i nar. Vost. no.2:220-230 '61.  
(MIRA 15:3)

(Zeravshan Valley--Maps, Early)

SMIRNOVA, Ol'ga Ivanovna; LEVIN, V.I., professor, redaktor; PAZEL'SKIY, S.V.,  
redaktor; PONOMAREVA, A.A., tekhnicheskiiy redaktor

[Functions in the 10th grade mathematics course; model treatment of  
the topic "Functions and their study. Derivative."] Funktsii v  
kurse matematiki 10 klassa; primernaya metodicheskaya razrabotka  
temy "Funktsii i ikh issledovanie. Proizvodnaya." Pod red. V.I.  
Levina. Moskva, Gos. uchebno-pedagog. izd-vo M-vn prosv. RSFSR,  
1956. 79 p.  
(Functions)

SMIRNOVA, O.I. (Leningrad)

Toxicology of isopropylbenzene hydrogen peroxide. Gig.i san.  
(MIRA 15:9)

26 no.12:22-25 D '61.

(HYDROPEROXIDE--PHYSIOLOGICAL EFFECT)

SMIRNOVA, O.I.

Bactericidal properties of the gastric and intestinal juices  
in high external temperature and insolation. Med. zhur. Uzb.  
(MIRA 17:2)  
no.9:67-70 S '62.

1. Iz Namanganskogo filiala Uzbekskogo nauchno-issledovatel'-  
skogo instituta tuberkuleza (dir. - dotsent R.P. Pulatov) i  
kafedry normal'noy fiziologii (zav. - prof. G.F. Korot'ko)  
Andizhanskogo gosudarstvennogo insituta.

KOROT'KO, G.F.; SMIRNOVA, O.I.

Gastric secretion and the bactericidal action of the gastric juice under high external temperature and solar radiation. (MIRA 13:6)  
Med.zhur.Uzb. no.8-9:79-83 Ag-S '58.

1. Iz kafedry normal'noy fiziologii (zav. - G.F. Korot'ko)  
i mikrobiologii (zav. - M.V. Los') Andizhanskogo gosudarst-  
vennogo meditsinskogo instituta.  
(GASTRIC JUICE) (HEAT--PHYSIOLOGICAL EFFECT)



TIUNOV, L.A.; SMIRNOVA, O.I.

Effect of carbon monoxide on the outcome of roentgenirradiation.  
Farm.i toks. 23 no.3:268-271 My-Je '60. (MIRA 14:3)  
(CARBON MONOXIDE) (RADIATION SICKNESS)

27.1220

39557  
S:205:62:002:003:003:015  
1021/1221

AUTHOR: Smirnova, O. I.

TITLE: Effect of polyamines on catalase activity of blood of irradiated animals

PERIODICAL: Radiobiologiya, v. 2, no. 3, 1962, 378-382

TEXT: The paper is based on the finding of Wang that complex compounds of triethylenetetraamine act on hydrogen peroxide in a manner similar to that of catalase (J. H. Wang, J. Amer. Chem. Soc., v. 77, no. 3, 822, 1955). The effect of polyamines on catalase activity of blood of irradiated animals and their survival time was studied. Triethylenetetraamine  $\text{Fe}^{+2} (10^{-3})$  mole/liter injected intraperitoneally into white rats/100 mg/kg b.w./15 min before irradiation with 700 r increased the catalase activity of the blood of the animals as well as their survival time. A similar result was obtained with dogs after an intravenous injection of 50mg/kg b.w. A protective effect was also obtained by injection of pentethylenhexamine  $\text{Fe}^{+2} (10^{-3})$  mole/liter into mice/dose. 200 kg/kg b.w. The increased survival time of the irradiated animals treated with the above complex compounds was due to higher levels of catalase. There are 3 figures and 1 table.

SUBMITTED: July 26, 1961

Card 1/1

L1844  
S/205/62/002/004/004/014  
I015/I215

27.1222

AUTHORS:

Tiunov, L.A., Vasil'yev, G.A., and Smirnova, O.I.  
(Leningrad)

TITLE:

The effect of lethal X-ray doses on the blood  
catalase activity

PERIODICAL: Radiobiologiya, v.2, no.4, 1962, 548-552

TEXT: There are contradictory reports in medical literature about the effect of radiation injuries on the catalase activity in blood. Experiments were carried out on 10 female dogs weighing 14-17 kg. The animals were X-irradiated from two PYM -3 (RUM-3) apparatuses simultaneously. The dose rate from apparatus No.1 was 12r/min. and that from No.2, 10r/min, up to a total dose of 600-650r. The blood catalase activity was determined every 5-10 min during one hour after irradiation. It was subsequently determined every second day during the entire observation period. The activity of catalase was measured manganometrically, according to the method of Bakh and Zubkova. Twenty days after irradiation, only one of

Card 1/2

S/205/62/002/004/004/014  
I015/I215

The effect of lethal X-ray doses...

the dogs survived. The other animals survived on an average 14.9 days. The blood catalase activity decreased within 5 min after irradiation, and reached its maximum decrease after 20-30 min. The low activity level remained during the subsequent days, with a maximum decrease on the 18th day (one third of the normal). It is assumed that the "catalase mechanism" is related to the primary reactions of the organism to radiation injuries. There are 2 figures. X

SUBMITTED: February 5, 1962

Card 2/2

SMIRNOVA, O.I. (Leningrad)

Effect of the iron-containing complex of triethylenetetramine  
on the growth of Crocker sarcoma. Pat. fiziol. i eksp. terap.  
7 no.4:50-52 JI-Ag '63. (MIRA 17:9)

... ..  
... .. "Orbitaceus de ... .. 'rev ... .."  
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... .. "Orbitaceus de ... .. 'rev ... .."  
... .. "Orbitaceus de ... .. 'rev ... .."  
... .. "Orbitaceus de ... .. 'rev ... .."

FAYNSHTEYN, G.Kh.; ODINTSOVA, M.M.; SMIRNOVA, O.K.

Preliminary data on some characteristics of the distribution of  
Lias diamond-bearing sediments in western Yakutia.  
Mat.po geol.i pol.iskop.IAk. ASSR no.2:35-47 '60. (MIRA 15:10)

(Yakutia—Diamonds)

SMIRNOVA, O.K.; ODINTSOVA, M.M.

Stratigraphy of Lower Jurassic sediments in the Tyung Valley.  
Trudy IAFAN SSSR. Ser.geol. no.6:165-171 '61. (MIRA 14:9)  
(Tyung Valley--Geology, Stratigraphic)  
(Diamonds)



ODINTSOVA, M.M.; SMIRNOVA, O.K.

Paleogeographic conditions of the formation of diamond continental  
and marine Jurassic placer deposits in the central and north-  
eastern parts of the Siberian Platform. Trudy IAFAN AN SSSR Ser.  
geol. no.9:142-148 '63. (MIRA 16:12)

TSEYTLIN, A.N.; SMIRNOVA, O.M.

Denitration of nitrose in the combined production of  
nitric and sulfuric acids. Izv.vys.uch.zav.; khim.i  
khim.tekh. 5 no.4:612-616 '62. (MIRA 15:12)

1. Khar'kovskiy politekhnicheskii institut imeni Lenina,  
kafedra tekhnologii neorganicheskikh veshchestv.  
(Nitrose)  
(Nitrosylsulfuric acid)

RANOV, A.I.; SMIRNOVA, O.M.

Acute reduction of whooping cough incidence in Kurgan Province. Zhur.  
mikrobiol., epid. i immun. 40 no. 12: 114-115 D '63. (MIRA 17:12)

1. Iz Kurganskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.

1. SMIRNOVA, O. M.

2. USSR (600)

4. Plant Lice

7. Controlling the grey apple aphid. Sad i og. No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.